

WHAT IS CLAIMED IS:

2/25/17
1. A fabric structure for making bags and the like comprising:

a fabric base sheet having a front surface adapted to be disposed to the outside of the bag to be made and a back surface;

a polymeric back layer containing SBC (styrenic block copolymer), said polymeric back layer having a front bonding surface bonded to the back surface of said fabric base sheet and a back surface; and

a protective layer made from a surface treatment agent being coated on said polymeric back layer, said protective layer having an inner surface bonded to the back surface of said polymeric back layer and an outer surface adapted to be disposed to the inside of the bag to be made.

2. The fabric structure as claimed in claim 1 further comprising a viscosity layer sandwiched between said fabric base sheet and said polymeric back layer.

3. The fabric structure as claimed in claim 2 wherein said viscosity layer is made of viscosity material containing SBC (styrenic block copolymer), viscosity improver, additive, and processing oil or butanone.

4. The fabric structure as claimed in claim 1 wherein said SBC (styrenic block copolymer) of said polymeric back layer is selected from

the group consisting of SBS (styrene-butadiene- styrene block copolymer), SEBS (styrene-ethylene-butylene- styrene block copolymer), SIS (styrene-isoprene-styrene block copolymer), SEPS (styrene-ethylene-propylene-styrene block copolymer, and the combination of SBS, SEBS, SIS and SEPS.

5. The fabric structure as claimed in claim 1 wherein said surface treatment agent containing PU (urethane polymer) material.

6. The fabric structure as claimed in claim 5 wherein said PU-based surface treatment agent is added with a pigment to form a colored protective layer.

7. The fabric structure as claimed in claim 1 wherein said surface treatment agent containing modified SBC (styrenic block copolymer) material.

8. The fabric structure as claimed in claim 7 wherein said modified SBC-based surface treatment agent is added with a pigment to form a colored protective layer.

9. The fabric structure as claimed in claim 7 wherein said modified SBC-based surface treatment agent contains SBC (styrenic block copolymer), silicone, IPA (isophthalic acid), TPT (tetraisopropyl titanate), and toluene.

10. The fabric structure as claimed in claim 7 wherein said modified SBC-based surface treatment agent contains SBC (styrenic block copolymer), wax, and toluene.

11. A fabric structure fabrication method comprising the steps of:

(a) preparing a fabric base sheet which has a front surface and a back surface;

(b) applying a polymeric back layer on the back surface of said fabric sheet, said polymeric back layer is made from polymeric material containing SBC (styrenic block copolymer);

(c) bonding said SBC-based back layer and said fabric base sheet together by pressure and then cooled down, forming a semi-finished sheet material; and

(d) applying a surface treatment agent containing urethane polymer material and solvent to the SBC-based back layer of said semi-finished sheet material, and then drying said semi-finished sheet material through a baking oven such that the solvent is volatilized and the surface treatment agent forms a protective layer at an outer surface of said SBC-based back layer.

12. The fabric structure fabrication method as claimed

in claim 11 wherein the step (b) includes the procedure of co-extrusion coating where a prepared SBC (styrenic block copolymer) polymeric back material and a viscosity material are separately fed into a lamination machine and heated at different temperatures and treated through respective fusion, cutting, and mixing procedures, and then delivered to a T-mold and gathered in the T-mold at about 3mm~5mm from the output port of the T-mold for enabling said SBC-based polymeric back material and said viscosity material to be fused together and squeezed into a SBC-based polymeric back layer, and then the SBC-based polymeric back layer thus obtained is covered on said fabric base sheet.

13. The fabric structure fabrication method as claimed in claim 12 wherein said SBC-based polymeric back material contains styrenic block copolymer (100PHR), processing oil (0~120PHR), plastics (0~100PHR), and additive (0~20PHR), and said viscosity material contains styrenic block copolymer (100PHR), processing oil (0~25PHR), viscosity improver (0~120PHR), and additive (0~20PHR); the heating temperature of said SBC (styrenic block copolymer) polymeric back material is at 80~200°C and the melt flow index of said SBC (styrenic block copolymer) polymeric back material is at 5~18g/10min, and the heating temperature of said viscosity material is at 80~200°C.

14. The fabric structure fabrication method as claimed

in claim 11 wherein the step (b) includes the procedure of extrusion coating where the back surface of said fabric base sheet is coated with a layer of viscosity agent and then heated through a baking oven, and then a prepared SBC (styrenic block copolymer) polymeric back material is melted in a lamination machine and extruded through a T-mold of the lamination machine, forming a SBC-based polymeric back film, enabling the SBC-based polymeric back film to be bonded to the layer of viscosity agent at the back surface of said fabric base sheet.

15. The fabric structure fabrication method as claimed in claim 14 wherein said SBC (styrenic block copolymer) polymeric back material contains styrenic block copolymer (100PHR), processing oil (0~120PHR), plastics (0~100PHR), and additive (0~20PHR), and said layer of viscosity agent contains styrenic block copolymer (100PHR), viscosity improver (0~120PHR), additive (0~20PHR), and methyl ethyl ketone (100~500PHR); the heating temperature of said SBC (styrenic block copolymer) polymeric back material is at 170~180°C and the melt flow index of said SBC (styrenic block copolymer) polymeric back material is at 5~18g/10min.

16. The fabric structure fabrication method as claimed in claim 11 wherein the step (b) includes the procedure of calendering backing where the back surface of said fabric base sheet is coated with a layer of viscosity agent and then heated

through a baking oven, and then a prepared SBC (styrenic block copolymer) polymeric back material is melted and calendered into a SBC-based polymeric back film by a heated roller set, enabling the SBC-based polymeric back film to be bonded to the layer of viscosity agent at the back surface of said fabric base sheet.

17. The fabric structure fabrication method as claimed in claim 16 wherein said SBC (styrenic block copolymer) polymeric back material contains styrenic block copolymer (100PHR), processing oil (0~120PHR), plastics (0~100PHR), and additive (0~20PHR), and said layer of viscosity agent contains styrenic block copolymer (100PHR), viscosity improver (0~120PHR), additive (0~20PHR), and methyl ethyl ketone (100~500PHR), the heating temperature of said heated roller set is at 90~160°C and the melt flow index of said SBC (styrenic block copolymer) polymeric back material is greater than 3g/10min.

18. The fabric structure fabrication method as claimed in claim 11, wherein said surface treatment agent contains polyurethane resin, dimethyl formamide, methyl ethyl ketone, toluene, silica, and silicone oil.

19. The fabric structure fabrication method as claimed in claim 11 wherein said surface treatment agent is a modified

SBC surface treatment agent containing styrenic block copolymer, silicone, isophthalic acid, tetraisopropyl titanate, and toluene.

20. The fabric structure^A fabrication method as claimed in claim 11 wherein said surface treatment agent is a modified SBC surface treatment agent containing styrenic block copolymer, wax, and toluene.

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